## 20. Challenging Case: Drinking Water Supply, Jakarta, Indonesia



Photo Credit<sup>43</sup>

## Background

Jakarta, the capital and largest city of Indonesia, was facing a water crisis. In 1997, only 42 percent of its residents had access to piped water and even many of these piped water users still relied in part on groundwater or bottled water. Those without piped water connections, particularly residents of disadvantaged neighborhoods, largely drew their water from community ground pumps, which provided intermittent flows and very poor-quality water. This inequality in access to piped water and in the quality of water was partly attributable to the tariff structure imposed by the municipal water utility, which disincentivized connecting poorer households. Later that year, the local government decided to pursue a PPP for the provision of piped water in Jakarta in an attempt to address the problem.

## **Project Structure**

To increase the opportunities for local companies to participate in the project, the public utility was split into two coverage areas, comprising the portions of the city to the east and west of the Ciliwung River. Two major international water companies expressed interest in providing piped water under this arrangement, though by law each would need to partner with a local company in order to operate as a public utility. Accordingly, a PPP would need to be executed for each coverage area.

Different international and Indonesian partners would form the private sector side of each PPP and the government-owned municipal water utility, PAM Jaya, would act as the public partner to both PPPs. However, none of the private companies were chosen on the basis of open, competitive procurement. Instead, the companies were selected based on personal relationships with government officials. The government further determined, unilaterally, which international company would pair with which Indonesian company. In June 1997 both private consortia signed 25-year agreements with PAM Jaya, in accordance with which they undertook responsibility for operating and managing Jakarta's water supply system in their respective service areas, east and west, with an emphasis on expanding coverage to poorer residents. The private partners were further responsible for maintaining the customer database and billing. PAM Jaya retained ownership of the underlying assets.

The private companies originally agreed to invest USD 318 million in the first five years of the contract to expand coverage and improve service delivery. While the private partners ultimately invested only USD 188.6 million over this period, the shortfall may be partly attributable to the fact that expected investments were denominated in Indonesian Rupiah, which suffered rapid depreciation following the Asian Financial Crisis that began in 1997. Further into the contract term, in November 2007, the operator for east Jakarta received a USD 5 million loan from the World Bank and, in May 2008, the Asian Development Bank provided USD 50 million in financing to the operator for west Jakarta. Additional information on financing is limited, due to a lack of transparency concerning project details.

Funding for the project was premised on fixed payments by PAM Jaya to the private partners based on the volume of water supplied and billed, which effectively decoupled the private partners' revenue from the actual billing revenue received. Accordingly, the government remained free to adjust user tariffs and to charge different user categories variable tariffs, while paying the private operators the same fixed amount per volumetric unit supplied. It was hoped that de-linking the private partners' profits from the billing revenue would remove a key disincentive to expanding coverage to poor neighborhoods, where billing revenue is typically low. In addition, the fee payable to the private operators

<sup>43</sup> Photo in the public domain published by Harlimedit https:// pxhere.com/en/ photo/1422229 Petriella, Tanita. 2014. "DKI Terus Merugi Akibat Kerja Sama dengan PAM Lyonaise dan Aetra." Jakarta Bisnis, April 18. http:// jakarta.bisnis.com/ read/20140418/77/ 220319/dki-terusmerugi-akibat-kerjasama-dengan-pamlyonaisedan-aetra;

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was indexed to the Rupiah-USD exchange rate and the Indonesian inflation rate. As a result of the above mechanisms, the public partner assumed the risk of currency exchange and actual cost recovery.

This proved challenging when the Asian Financial Crisis struck only a few months after the contracts were signed, resulting in political and economic turmoil in Indonesia and a drastic depreciation of the Rupiah. As the fee payable by PAM Jaya was tied to the USD, payments owed to the private partners rose at the same time as revenues from customers fell. When the contracts were signed, the average tariff charged to consumers was eleven percent higher than the fee payable to the private operators. By 2001, the fee owed to the private partners was 60 percent higher than the average tariff. Due to political tensions, PAM Jaya was unable to raise tariffs in a manner sufficient to compensate and was forced to acquire more and more debt to cover its liabilities to the private operators. This cycle would repeat itself several times when the government lacked the political will to raise tariffs during periods of inflation. As a result, PAM Jaya struggled to make the payments due to the private operators, which in turn diminished their profits. The situation did not change much even after the contracts were revised in 2001 and again in 2004 to provide for regular tariff increases and to reallocate some of the risks.

While the contracts set ambitious performance targets, they provided little in the way of enforcement and incentives. The agreements envisioned universal piped drinking water coverage for Jakarta by 2023, with a target of 70 percent of Jakarta's population by 2002, as well as a significant reduction in nonrevenue water and improvements in the quality of service and overall quality of the water.

## **Lessons Learned**

After 18 years of operation, water service coverage has only reached 59 percent, with coverage remaining particularly limited among low-income households. The water leakage level was still at 44 percent as of 2013, down from 56 percent under PAM Jaya but above the contractual target of 35 percent by 2003. In 2014, the deficit incurred by Jakarta's municipal water utility stood at IDR 1.18 trillion (USD 84 million) and was expected to reach IDR 18.2 trillion (USD 1.3 billion) by the time the contracts would conclude in 2022. However, waterfocused non-governmental organizations in Jakarta challenged the constitutionality of the concession agreements in court. In 2018, the Supreme Court ordered the Jakarta government to terminate contractual relations with the two private partners.44

This project highlights the following:

- Transparent processes and public engagement improve the likelihood of delivering a successful PPP. This includes conducting a competitive procurement process and disclosing key information about the project to the public, subject to appropriate restrictions on the disclosure of confidential or proprietary information. Openness and transparency tend to promote public support for and confidence in a project, while closed processes may engender mistrust.
- Both parties to a PPP should plan for and remain flexible in the face of the external adversity during the life of the partnership. In this case, it was not possible to predict the Asian Financial Crisis, but its occurrence exposed some flaws in the structure of the PPP that began to threaten its long-term viability. Both parties should be ready to come together in good faith to negotiate appropriate modifications to respond to significant, unpredictable changes in circumstances and, in case either party refuses to do so, the PPP agreement should have sufficient safeguards in place to ensure a reasonable outcome. The latter can range from provisions permitting the aggrieved party to procure independent, third-party technical assessments with binding recommendations, to mediation and, ultimately, more formal dispute resolution mechanisms, such as arbitration.